

LOWER DISPOSAL COSTS.
LOWER MAINTENANCE COSTS.

ONE LAMP. TWO SOLUTIONS.

Ecolux[®] NC[™] NON-CYCLING, LOW MERCURY HPS LAMPS.

Reduced mercury for lower disposal costs. Environmentally-friendly Ecolux[®] NC[™] lamps feature mercury reduction of 56% up to 93% vs. standard HPS lamps and a lead-free base. Passes the EPA Toxicity Characteristic Leaching Procedure Test (TCLP), substantially lowering disposal costs (up to \$4 per lamp reduction), where applicable.*

Non-cycling makes end-of-life replacement quick and easy. Most high pressure sodium lamps will cycle on and off when approaching end of life, making expired lamps difficult to locate and replace. The Ecolux NC lamps have an end-of-life indicator, blue-white light, so they can be easily spotted. This can reduce maintenance service trips thus reducing labor costs by \$20 per lamp in a typical streetlighting system.

More light. Popular 100- and 400-watt types feature 6% and 11% higher initial lumens, respectively, than standard lamps. Other wattages deliver the same high light output as standard HPS lamps.

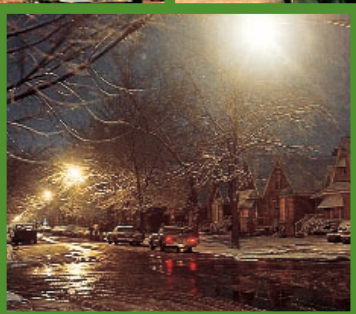
Direct replacement of existing HPS lamps. GE Ecolux NC lamps fit standard high pressure sodium sockets. No new ballasts or fixtures are needed.

Same long life and outstanding efficiency as standard HPS lamps.

*State regulations vary. Consult your state EPA.

Applications

- Roadway Lighting
- Parking Areas
- Industrial



GE Lighting

GE Ecolux[®] Non-Cycling, Low Mercury High Pressure Sodium Lamp Specifications

PRODUCT INFORMATION	CLEAR 70-WATT ELLIPTICAL	CLEAR 100-WATT ELLIPTICAL	CLEAR 150-WATT ELLIPTICAL	CLEAR 250-WATT TUBULAR	CLEAR 400-WATT TUBULAR
Product Code	14672	14673	40390	14674	14675
ANSI or IEC Code	S62ME-70	S54SB-100	S55SC-50	S50VA-250	S51WA-400
Description	LU70/ECO/NC	LU100/ECO/NC	LU150/ECO/NC	LU250/ECO/NC	LU400/ECO/NC
Physical Characteristics					
Burning Position	Universal	Universal	Universal	Universal	Universal
Bulb Designation	ED23.5	ED23.5	ED23.5	ED18	ED18
Bulb Material	Hard Glass	Hard Glass	Hard Glass	Hard Glass	Hard Glass
Bulb Nominal Diameter, mm (in.)	75 (2 3/4")	75 (2 3/4")	75 (2 3/4")	57 (2 1/4")	57 (2 1/4")
Base Type	Mogul	Mogul	Mogul	Mogul	Mogul
(Material)	(Brass/No Lead)	(Brass/No Lead)	(Brass/No Lead)	(Brass/No Lead)	(Brass/No Lead)
Light Center Length, mm (in.)	127 (5")	127 (5")	127 (5")	146 (5 3/4")	146 (5 3/4")
Max. Overall Length, mm (in.)	197 (7 3/4")	197 (7 3/4")	197 (7 3/4")	248 (9 3/4")	248 (9 3/4")
Arc Length, mm (in.)	30 (1 1/8")	38 (1 1/2")	43 (1 3/4")	70 (2 3/4")	86 (3 3/8")
Max. Bulb Temp. °C	400° C	400° C	400° C	400° C	400° C
Max. Base Temp. °C	210° C	210° C	210° C	210° C	210° C
Eccentricity: Bulb to Base	3°	3°	3°	3°	3°
Eccentricity: Bulb to Arc Axis	3°	3°	3°	3°	3°
Luminaire Characteristics					
	— Open or Enclosed —				
Nominal Lamp Watts	70	100	150	250	400
Nominal Lamp Volts	52	55	55	105	100
Maximum Lamp Amps – Starting	2.4	3.2	4.8	4.5	7.5
Nominal Lamp Amps – Operating	1.6	2.1	3.2	3.0	4.6
Max. Current Crest Factor	1.8	1.8	1.8	1.8	1.8
Ballast OCV, Minimum	110	110	110	198	198
Starting Pulse Requirements					
Pulse Peak Volts (min.)	2500	2500	2500	2500	2500
(max.)	4000	4000	4000	4000	4000
Min. Pulse Width (microseconds)	1 @ 2250	1 @ 2250	1 @ 2250	1 @ 2250	1 @ 2250
Min. Pulse Repetition	50 per second	50 per second	50 per second	50 per second	50 per second
Min. Pulse Peak Current (amp)	0.2	0.2	0.2	0.2	0.2
Photometric Characteristics					
Initial Lumens	6300	10500	16000	29000	54000
Mean Lumens @ 50% Rated Life	5670	8550	14400	26100	45000
Average Rated Life (hrs.)	24000	24000	24000	24000	24000
Color Rendering Index @ CCT (K)	23 @ 1900	23 @ 2000	23 @ 2000	30 @ 2000	30 @ 2100
Warm Up Time (Minutes) to 90%	3 to 4	3 to 4	3 to 4	3 to 4	3 to 4
Hot Restart Time (Minutes) to 90%	5 maximum	5 maximum	5 maximum	5 maximum	5 maximum
CIE Chromaticity Coordinates: X-	0.536	0.530	0.527	0.529	0.525
CIE Chromaticity Coordinates: Y-	0.414	0.424	0.418	0.417	0.421

Where you have fluorescent lighting, use GE Ecolux[®] and Ecolux[®]XL reduced mercury fluorescent lamps.



Reference Lumens—Rated average lamp lumens obtained under controlled laboratory conditions in a prescribed burning position. Initial Reference Lumens refer to the lamp lumen output after 100-hours burning. Mean Reference Lumens refer to the lamp lumen output at the mean lumen point during lamp life. The mean lumen point occurs at 50% rated life for high pressure sodium lamps. Lamp performance on typical systems under typical service conditions will vary from the reference lumens ratings.

Lumen maintenance is measured under specified test conditions at rated lamp watts for lamps that have been operated 10 or more burning hours per start on typical commercial ballasts. Rated mean lumens are measured at 50% of rated life, at rated lamp watts.

For spot relamping calculations, use an estimated average life (@ 10 hours/start) of 24,000 hours corresponding to 50% burnouts.

Caution—THE FOLLOWING INSTRUCTIONS MUST BE COMPLIED WITH TO HELP AVOID POSSIBLE SHATTERING AND EARLY FAILURE OF THE LAMP. General Electric Company will not be responsible for poor lamp performance, personal injury or property damage resulting from failure to follow these instructions.

WARNING

• This is a vacuum jacket lamp and may implode if broken. As a precaution, wear safety glasses and gloves when installing or removing lamp.

CAUTION

- Electrically insulate any metal to glass support in fixture to avoid decomposition of the glass.
- Protect lamps from direct contact with liquids (such as rain, sleet or snow) to avoid breakage from thermal shock.
- Screw lamp firmly but not forcibly into the socket to minimize loosening due to vibration. Do not use excessive force as the glass bulb may break.
- Do not scratch glass bulb because it may break during installation or later during lamp operation.
- Turn power off and let lamp cool before removal to avoid potential burn and electrical shock hazard during lamp replacement.
- Do not touch the lamp base shell during operation to avoid potential electrical shock hazard.



GE Lighting